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(Cont.)

said direct spacing between said end surfaces due to said resilient member with said resilient member having opposite ends thereof each ending short of said end edges; and

engagement means adhered to said end surfaces and capable of engaging exposed surfaces of such outer wall tissues sufficiently to remain so engaged against the said restoring forces, said resilient member being secured to a first side of said flexible strip of deformable material positioned between any outer wall tissues engaged by said engagement means and said resilient member.

REMARKS

This communication is in response to the Action of December 7, 1999. In that Action, claims 2, 4 through 7, 16, 23, 27, 28 through 31, 39, 41, 43 and 44 were allowed, claim 21 was indicated to be allowable if rewritten to overcome a wording based difficulty therein, claim 35 was objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form, and claims 3, 24 through 26, 32 through 34, 36 through 38, and 45 through 48 were rejected with this rejection being made final.


The applicant has rewritten claims 3 and 21 to correct an inadvertent error and to clarify the meaning thereof.

The Examiner first rejects claim 21 under 35 U.S.C. 112 as lacking an antecedent basis for the phrase "said resilient member" appearing in line 10. The applicant found an inadvertent omission in the last amendment of this claim, and believes the above amendment supplying this omission overcomes this rejection.

The Examiner next rejects claims 3, 24, 26, 36 and 47 under 35 U.S.C. 102 as being anticipated by Spanish Utility Model 289561 to Iriarte. The Examiner appears to contend that the Spanish reference nasal dilator, having body 2 thereof over its elastic strip 1 as mounted on the nose of a user, has, as a result, this elastic strip as a segment devoid of adhesive over the user's nose to thereby meet claim 3. With this contention, the applicants must respectfully disagree.

Claim 3 of the present application recites adhesives being present on the first and second end regions of the truss member which adhesives are adapted to adhesively engage the outer wall tissue of the nasal passages. Further recited is that there is a resilient member therein which has an adhesive in contact with it. Of course, the adhesives on the first and second end regions, if they are to be able to engage the outer wall tissues of the nasal passages of the user's nose, must face that nose during use. As shown in the drawings, and as described in the specification, the adhesive on the resilient member is also shown on that surface of the resilient member facing the user's nose, i.e. on the surface thereof oriented at least in part in the same direction as the adhesives at the end regions face. Thus, both the adhesive on the resilient member and the adhesives on the first and second end regions must face the user's nose, that is, be on surfaces oriented at least in part in a common direction.

On the other hand, the nasal dilator of the Spanish reference has no adhesive on the surface of elastic strip 1 that faces the user's nose. This is the basis of the Examiner's rejection in pointing out there is a segment devoid of adhesive bridging a patient's nose, a situation which occurs because of adhesive tape body 2 having an entire surface thereof covered with adhesive as the sole means for adhering itself and strip 1 to a user's nose. Thus, there is no adhesive in contact with the surface of the resilient member facing the user's nose in the dilator of the Spanish reference and, as a result, the dilator disclosed therein cannot come within claim 3 so construed. Nevertheless, the applicant has amended claim 3 to make clearer yet that the adhesive substance in contact with the resilient member is on a surface of that member oriented at least in part in the same direction as the adhesives face at the first and second end regions to engage nasal outer wall tissues. In these circumstances, the applicant respectfully submits that claim 3 is allowable over the cited prior art, and that claims 24 and 26 in depending on claim 3 are also allowable. Claim 26, in reciting a separating material positioned between the rest of the truss and the user's nose, clearly further distinguishes over the Spanish reference dilator which discloses no material at all between the user's nose, on one hand, and body 2 and elastic strip 1 on the other.




As to the rejections of claims 36 and 47, the Examiner appears to argue in Paragraph 11 of the Action that the Spanish reference discloses an adhesive between strip 1 and body 2 with the dilator end surfaces that adhere to, and are located on, opposite sides of a wearer's nose being oriented in the same manner. The applicant is uncertain as to the import of this argument, and so will restate how these claims distinguish from the Spanish reference.

The concept of the orientation of a surface, or of surface portions, commonly used in geometry is based on the direction followed by a unit vector that is positioned normal to such a surface portion. As an example, the applicant is including herewith page 122 from the book entitled "Introduction to Differential Geometry" by A. Goetz published in 1970 by the Addison-Wesley Publishing Company, Inc. The second full paragraph on that page begins with a sentence indicating this concept of a normal unit vector establishing the orientation of a surface at a particular point. That is, the surface at that point faces in a direction set by the direction of this unit normal vector.

Both claims 36 and 47 describe end surfaces with an engagement means thereon that renders them capable of engaging the exposed surfaces of outer wall tissues of a user's nose. Thus, these end surfaces are oriented in such a way as to face the user's nose.

Each of claims 36 and 47 also state that the truss therein has in it a resilient member in contact with an adhesive at a surface of that member which is oriented, at least in part, in the same direction as are these end surfaces. That is, a unit normal vector extending from some part of the end surfaces and another extending from some surface portion of the resilient member must be substantially parallel to one another. Since the unit vector for the end surfaces must point toward the user's nose if those surfaces are to have an engagement means on them which engages the user's nose, the adhesive on the resilient member must also be on a surface facing the user's nose to meet these claims.

The Spanish reference dilator, however, has strip 1 with adhesive in contact with a surface thereof that only faces body 2, that is, on a surface of strip 1 which is oriented in directions opposite those directions that the surface thereof facing the user's nose are directed. As indicated in that reference, there is no adhesive on the surface of strip 1 facing the user's nose because the




adhesive in that dilator is provided by that adhesive coated on body 2 which is in contact with only the opposite side surface of strip 1 facing away from the user's nose. In these circumstances, the applicant respectfully submits that claims 36 and 47 are also clearly allowable over the Spanish reference.

The Examiner then rejects claims 32 through 34, 37, 38, 45, 46 and 48 under 35 U.S.C. 103 as being obvious in the face of the Spanish reference. With respect to claim 32, the Examiner here also appears to contend that the strip 1 of the Spanish reference, being free of any adhesive on the side thereof facing the user's nose, provides a substantial portion of the intermediate section not adhesively engaged with nasal outer wall tissues to thereby render that claim obvious. With this contention also, the applicant must respectfully disagree.

The Examiner has additionally argued in Paragraph 11 of this Action that claim 32, along with claims 36 and 47 as indicated above, is met by the adhesive provided between strip 1 and body 2 of the Spanish reference nasal dilator because of the end surfaces of that dilator that are adhered to and located on opposite sides of the nose being oriented in the same manner. As with claims 36 and 47, there is recited in claim 32 that the end surfaces have an engagement means adhered thereto for engaging the exposed surfaces of the outer wall tissues of a user's nose, and that a resilient member is in contact with an adhesive at a surface thereof oriented, at least in part, as are those end surfaces.

So, as above in connection with claims 36 and 47, the applicant again respectfully submits that the language of claim 32 requires a surface of the resilient member that is in contact with the adhesive, and the dilator end surfaces, to all commonly face the user's nose at least in part. This cannot be met by the Spanish reference dilator as the only adhesive on strip 1 therein is against the surface of that strip facing away from the user's nose as supplied by body 2, and thus a surface not oriented in any part as are the end surfaces of that dilator which are adhered to the user's nose. Therefore, the applicant offers that claim 32 is clearly allowable over the Spanish reference, and that claims 33, 34 and 45, in depending on claim 32, are also clearly allowable over the Spanish reference.



Claim 34 especially stands out over the Spanish reference in having a pair of resilient members recited therein versus the single resilient member used in the Spanish reference dilator. That dilator has body 2 thereof adhered to, and across, the full width of strip 1 with the result that there can be no significant flexibility in body 2 across this width to allow for stress relief in the nasal skin during wrinklins of the user's nose, sneezes and the like. In fact, there isn't even a hint of any recognition of such problems in that reference. On the other hand, the plural resilient members set out in claim 34 allow a space to be provided between them in the dilator to permit the plural resilient members to move laterally to and away from one another during such wrinklins or sneezes, and to further permit transporting water vapor exuded by the nasal skin through that space.

Furthermore, as clearly seen from the Spanish reference, the use of two strips like strip1 side by side would be sufficient to cover the entire center part of body2 and more to thus extend beyond the side edges of that body. As a result, only the smallest end edges of the body would be left to adhere to the user's skin. Such an arrangement would lead to a very great likelihood of a user being unable to keep that dilator adhered to the user's nose through wrinklins, sneezes, contacts with pillows, etc. Thus, the applicant respectfully submits that claim 34 is far from being met by anything disclosed in the Spanish reference. Similarly, claim 37 should be allowable in depending on claim 36, which was demonstrated above to be allowable, and because of the recitation therein of plural resilient members. This claim, too, is far from anything disclosed in the Spanish reference. Similarly, claim 38 in depending on claim 36 should also be allowable.

Claims 45, 46 and 48, in depending on claims 32, 36 and 47, respectively, should also be allowable in view of those latter claims having been demonstrated allowable above. The applicant notes, however, nothing in the Spanish reference suggests the use of plastic for the nasal dilator therein, nor makes any suggestion for the use of such materials.

The Examiner lastly rejects claim 25 under 35 U.S.C. 103 as being obvious in the face of the Spanish reference taken in view of U.S. Patent 4,274,402 to Shippert. However, claim 25, in depending on claim 3, should also be allowable.



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Application No.: 08/874,781

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In view of the foregoing, the applicant respectfully requests the Examiner to reconsider his rejection of claims in view of the amendments thereto, and further requests the Examiner to allow all of the claims as amended.

The Commissioner is authorized to charge payment of any patent application processing or filing fees under 37 C.F.R. 1.16 and 1.17 or credit any overpayment to Deposit Account No. 11-0982.

Any inquiries regarding this application should be directed to Theodore F. Neils at (612) 339-1863.

Respectfully submitted,

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